

Can EMREX help 4EU+?

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University of Warsaw

4EU+ Mobilities: Digitalisation of Data Exchange
January 26th, 2021



Agenda

- EMREX project
- EMREX architecture
- EMREX data transfer
- EMREX in Poland
- EMREX implementation in USOS
- EMREX in Norway (probably will be skipped)



EMREX

Field trial on the impact of enabling easy mobility on recognition of external studies



EU Erasmus+ KA3 project (2015-2017).

**Denmark, Finland, Italy,
Norway, Sweden**



and Poland

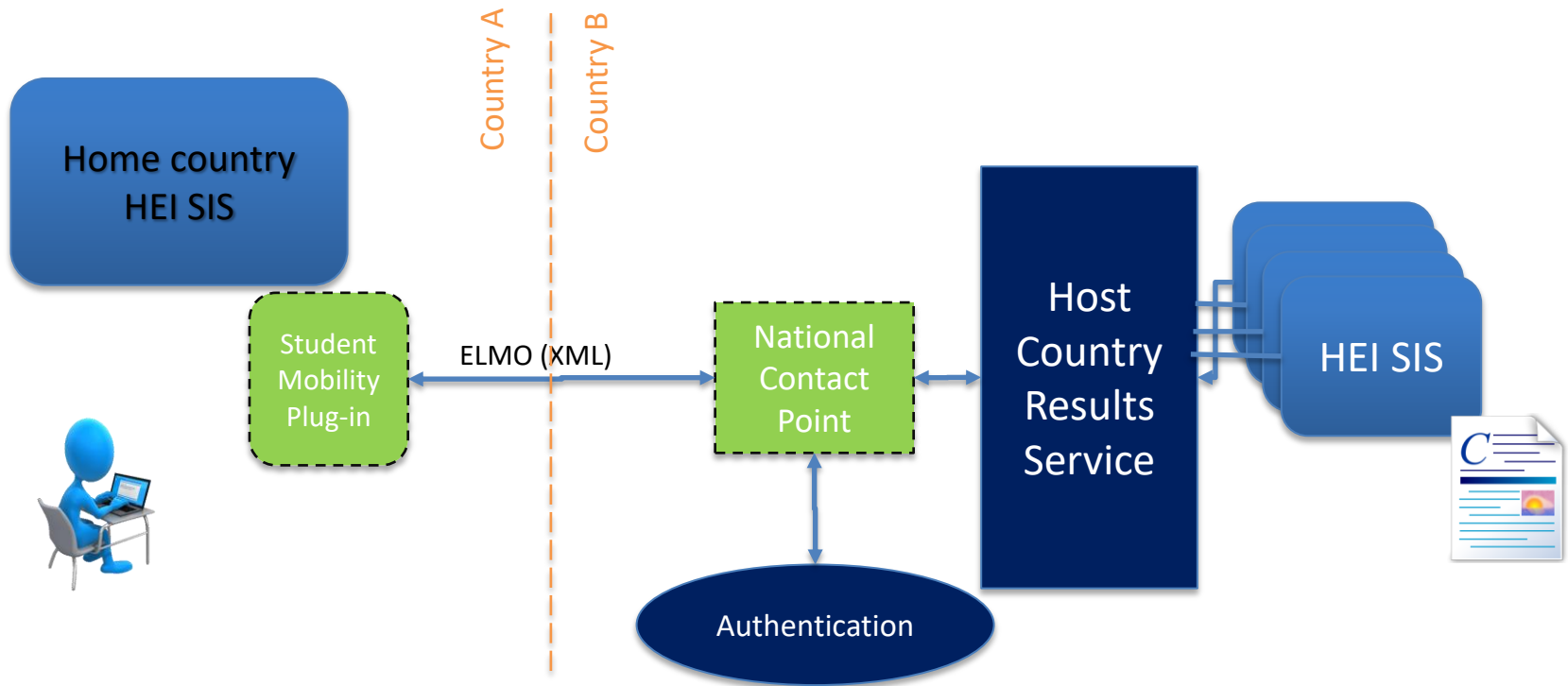
- Building platform for an effective transfer of student achievements between partner institutions.
- Running field trial.

EMREX Network

- Student achievements are described in a common data format **EMREX-ELMO** which has a status of an open semi-standard.
- Each partner adds **student mobility plug-in** and **EMREX Client** to local student information systems (**SIS**), sets up **national contact points** at country-level (or at institution-level) through which partner institutions may get access to data on student achievements.
- Data transfer is initiated by students.
- Authorization is required at home institution and host institution.
- Common software is open source and can be reused by new institutions.
- EMREX website: www.emrex.eu
- EMREX on GitHub: github.com/emrex-eu



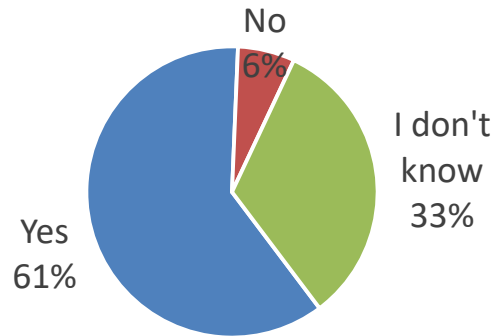
How it works?



Student returning home can retrieve his achievement data electronically

Survey at the end of the field trial (production systems)

Would you use EMREX?

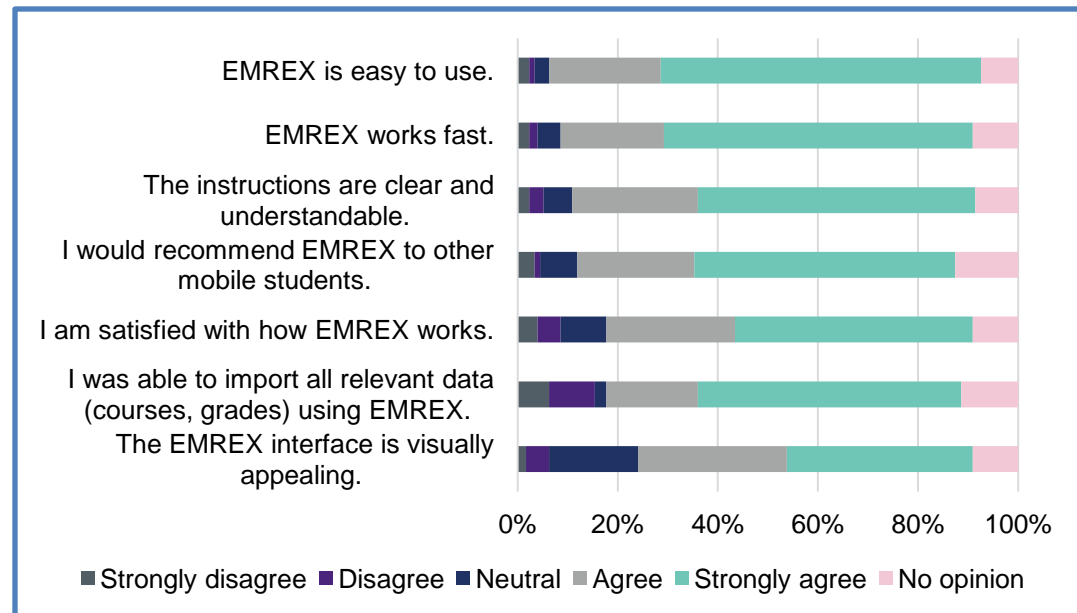


“Very quick and straightforward to use”

“The courses etcetera are all in Swedish”

“I would like to see some extra information on courses”

User experience





EMREX in Poland

LIVE DEMO

(if network works skip the following 7 slides)

Student Robert
from
the University of Warsaw
spent
summer semestr 2016
in
the Arctic University of
Norway



Student returns home after the last exam, no need to wait for the paper version of the transcript of records. At some moment student signs in to the student portal of the University of Warsaw.

INTRODUCTION

REGISTRATIONS

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- ▶ cart
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- ▶ direct for groups
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- ▶ for exams
- ▶ token registrations

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 - ▶ my grades
 - ▶ **EMREX**
- ▶ linkage
- ▶ POL-on
- ▶ decisions
- ▶ promotions
- ▶ dean's groups
- ▶ applications
- ▶ rankings
- ▶ applications
- ▶ stipends
- ▶ student mobility
- ▶ surveys
- ▶ payments
- ▶ diplomas



Import your achievements data

In this module, you can import your achievements from the external institution.

[Start new import](#)



University of Warsaw

You're using a **beta** version of the student mobility data exchange service.

This service is a part of an international project (EMREX) which is still in the stages of being developed and tested. If you encounter any technical problems please report it in your dean's office.



Student clicks blue button

Start new import

Chooses Norway

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- ▶ surveys
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- ▶ diplomas



Import your achievements data





Choose country and institution

	Denmark
	Finland
	Italy
	<u>Norway</u>
	Poland
	Sweden



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Student signs in using central authorization service in Norway

Log in using Feide



Feide is the chosen solution of the Department of Education for secure identification in the education sector [Log in using Feide](#)



Users from Norwegian universities and colleges



Log in using ID-porten with MinID, BankID, Buypass or Commfides



Diploma Registry 1.26 - 05.10.2017 10:32

www.vitnemalsportalen.no

Email: vitnemalsportalen@ceres.no

[Read about our usage of cookies.](#) x



[English](#) | [Bokmål](#) | [Nynorsk](#) | [Sámegiella](#)

Login through Feide

Diploma Registry has requested that you login. You have chosen **UIT The Arctic University of Norway** as your affiliation. [Change?](#)


Username

Password

Login

[Forgot username or password?](#)

Student is admitted to the Central Registry of student results in Norway, can see his achievements






■ Welcome Robert

My results

If you need documentation of results achieved in Norway that do not appear in the diploma registry, please contact the relevant institution.


UiT The Arctic University of Norway

Results (30 ECTS)

<input checked="" type="checkbox"/>	Course code	Course	Semester	Credits	Grade	Grade distribution A B C D E ?
<input checked="" type="checkbox"/>	ENG-1016	Introduction to English Sound Patterns	2016 Autumn	10 ECTS	B	
<input checked="" type="checkbox"/>	PSY-1005	Social psychology	2016 Autumn	10 ECTS	E	
<input checked="" type="checkbox"/>	STV-1006	Arctic Norway - Aspects of Politics, Government and International Relations	2016 Autumn	10 ECTS	C	

[View selected results](#)

[Abort transfer](#)

 Diploma Registry 1.26 - 05.10.2017 10:32
www.vitnemalsportalen.no
Email: vitnemalsportalen@ceres.no

Students confirms, chooses green button

Transfer records



UiT The Arctic University of Norway

Results (30 ECTS)

Course code	Course	Semester	Credits	Grade	Grade distribution				
					A	B	C	D	E
ENG-1016	Introduction to English Sound Patterns	2016 Autumn	10 ECTS	B	1	2	2	1	1
PSY-1005	Social psychology	2016 Autumn	10 ECTS	E	1	2	2	2	1
STV-1006	Arctic Norway - Aspects of Politics, Government and International Relations	2016 Autumn	10 ECTS	C	1	1	2	2	1

The document has been signed. You can now transfer the results.

[Signed document with selected results \(PDF\)](#)

NB: Some browser's internal PDF viewers do not show digital signature. In such cases, we recommend using Adobe Acrobat Reader.

I confirm that these results will be transferred to https://usosweb.mimuw.edu.pl/kontroler.php?_action=dla_stud/studia/oceny/emrex/importujElmo

Transfer records

Back

[Abort transfer](#)



Diploma Registry 1.26 - 05.10.2017 10:32

www.vitnemalsportalen.no

Email: vitnemalsportalen@ceres.no

and is back home, in Warsaw, with the list of courses ...

USOS web

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- ▶ applications
- ▶ rankings
- ▶ applications
- ▶ stipends
- ▶ student mobility
- ▶ surveys
- ▶ payments
- ▶ diplomas

WARZAWA

University of Warsaw

Import your achievements data

ELMO file has been imported correctly
Imported data come from the institution: UIT - Norges arktiske universitet

Data in the ELMO file does not match data in the database. List of inconsistencies:

- family name -

If you want, you can also preview the files being sent:

- PDF file (optionally digitally signed),
- EMREX-ELMO file (digitally signed).

Courses not linked with any study program

No.	Course	Academic term	Grades	Class	ECTS credits
1	Introduction to English Sound Patterns (en) Innføring i engelske språkltyder og lydmonstre (no) ENG-1016-1	2016 Autumn (en) 2016 Haust (nn) 2016 Høst (no)	B	not available	10
2	Social psychology (en) Sosialpsykologi (no) PSY-1005-1	2016 Autumn (en) 2016 Haust (nn) 2016 Høst (no)	E	not available	10
3	Arctic Norway - Aspects of Politics, Government and International Relations (en) Arctic Norway - Aspects of Politics, Government and International Relations (no) STV-1006-1	2016 Autumn (en) 2016 Haust (nn) 2016 Høst (no)	C	not available	10

[Return](#)

and the signed transcript of records which – according to law – is equivalent to the paper version signed by hand

Podpisano. Wszystkie podpisy są poprawne. Panel Podpis

Podpisy [X]

[Menu] Sprawdź poprawność wszystkich

✓ **Wersja 1: Podpisane przez CERES**

Podpis jest prawidłowy:
 Źródło Trust uzyskane z Adobe Approvec
 Dokument nie został zmieniony po za
 Tożsamość podpisującego jest prawid
 Podpis zawiera osadzony znacznik cza
 Podpis nie obsługuje LTV i wygaśnie p

> Szczegóły podpisu

Ostatnio sprawdzone: 2017.11.11 12:23:22

Pole: Signature1 na stronie 1

[Kliknij, aby wyświetlić tę wersję.](#)



Name: Robert **Date of birth: 15/04/1995**

Robert has chosen to share the following results:

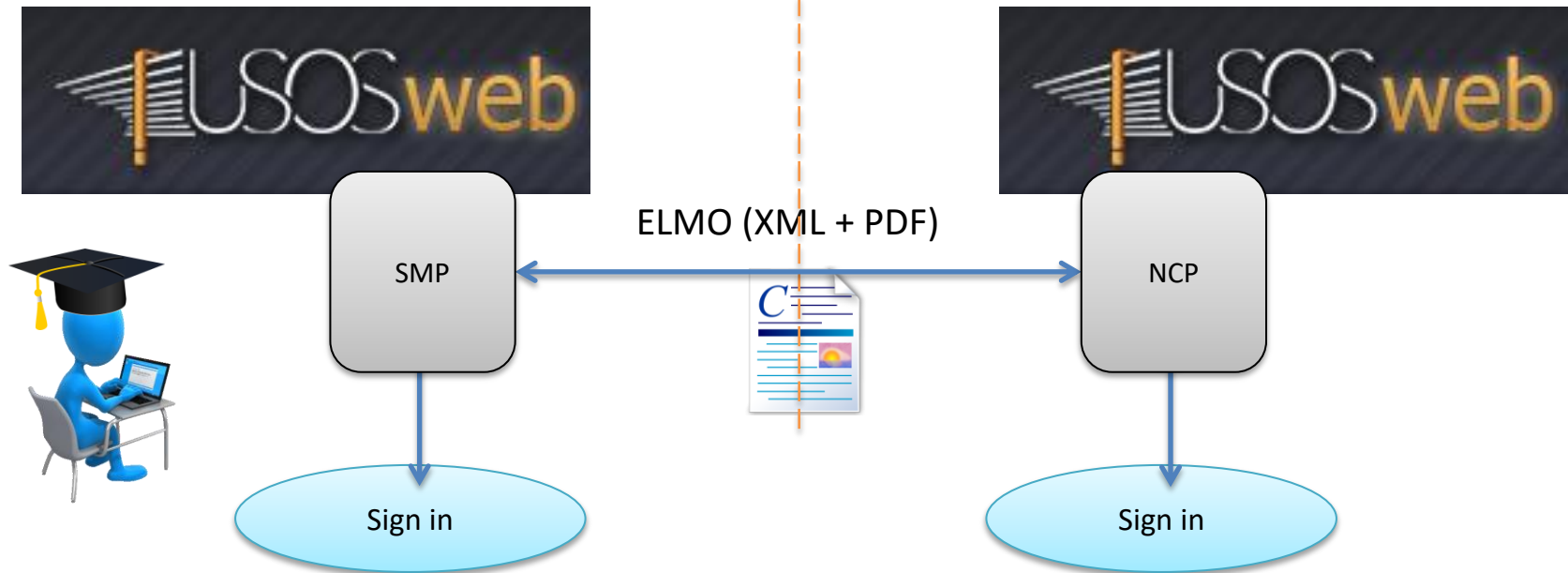
UiT The Arctic University of Norway
Results (30 ECTS)

Course	Semester	Credits	Grade	Grade distribution					
				A	B	C	D	E	
ENG-1016	Introduction to English Sound Patterns	2016 Autumn	10 ECTS	B					
PSY-1005	Social psychology	2016 Autumn	10 ECTS	E					
STV-1006	Arctic Norway - Aspects of Politics, Government and International Relations	2016 Autumn	10 ECTS	C					

How EMREX works in Poland?

Warsaw (sending institution)

Cracow (receiving institution)

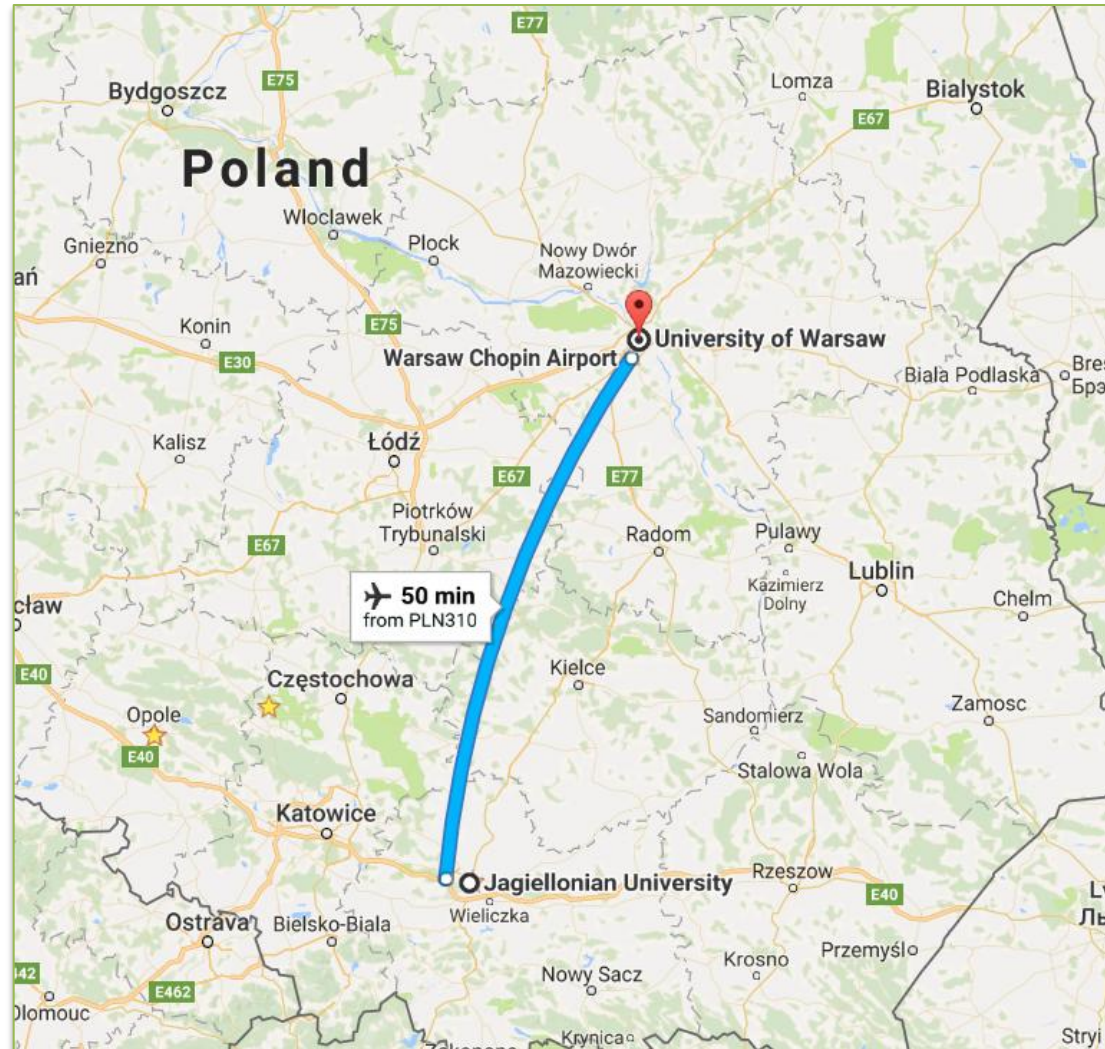


Student returning home to Polish HEI with USOS from another Polish HEI with USOS can easily retrieve his achievement data electronically

LIVE DEMO

(if network works skip the following 8 slides)

Student Agnieszka
from
the University of Warsaw
spent
summer semestr 2016
in
the Jagiellonian
University in Cracow



Student returns home after the last exam, no need to wait for the paper version of the transcript of records. At some moment student signs in to the student portal of the University of Warsaw.

USOS web

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- applications
- rankings
- applications
- stipends
- student mobility
- surveys
- payments
- diplomas

Import your achievements data

In this module, you can import your achievements from the external institution.

[Start new import](#)

List of imports

Showing elements 1..1 (out of 1)

Date and time	Institution	Status	
2017-10-02 10:19:40	Jagiellonian University in Kraków	Import completed - data has been saved	details

University of Warsaw

You're using a **beta** version of the student mobility data exchange service.

This service is a part of an international project (EMREX) which is still in the stages of being developed and tested. If you encounter any technical problems please report it in your dean's office.

Student clicks blue button

Start new import

Chooses Poland, then UJ

The screenshot shows the USOSweb interface. At the top, there are navigation tabs: NEWS, DIRECTORY, MY USOSWEB, STUDENT'S SECTION (highlighted), STAFF SECTION, and COMMON SECTION. Below the tabs is a map of Warsaw with the text 'University of Warsaw'. A sidebar on the left contains a menu with categories: INTRODUCTION, REGISTRATIONS (with sub-items like calendar, cart, for courses, etc.), and MY STUDIES (with sub-items like tests, grades, etc.). A 'choose institution' dialog box is open in the center, featuring a 'filter:' input field and a table of institutions. The table lists the following:

UMK	Nicolaus Copernicus University in Toruń
UJ	Jagiellonian University in Kraków
UMA	Adam Mickiewicz University in Poznań
UMCS	Maria Curie-Skłodowska University
UO	University of Opole
UwB	University of Białystok

Below the dialog, there is a 'Choose' section with a list of countries and their flags: Denmark, Finland, Italy, Norway, Poland, and Sweden. On the right side of the page, there is a banner for the University of Warsaw and a notice about the beta version of the student mobility data exchange service, along with logos for the European Union and Erasmus+.


This is USOSweb in Cracow, student chooses sign in button

USOSweb

NEWS DIRECTORY MY USOSWEB **STUDENT'S SECTION** STAFF SECTION COMMON SECTION CONTACT

Jagiellonian University in Kraków


Send your achievements data

 Look out. You are about to send your personal data, along with some information on your grades, courses and study programs, to an external application.

[Sign in to continue](#)



ADDITIONAL INFORMATION

You will see the courses to be included in the report after you sign.

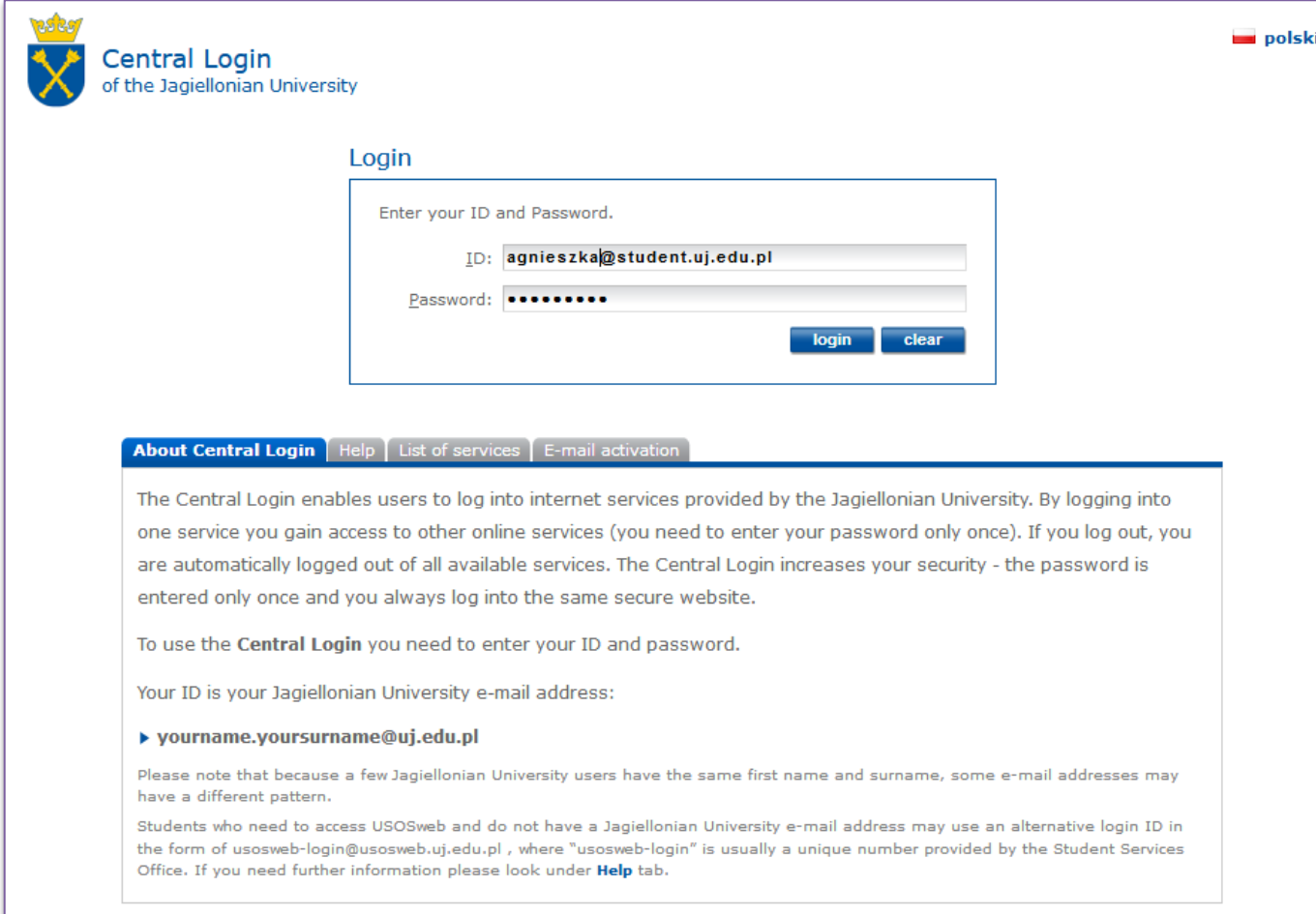
 Jagiellonian University in Kraków


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Student signs in using central authorization service of the Jagiellonian University



 **Central Login**
of the Jagiellonian University

[polski](#)

Login

Enter your ID and Password.

ID:

Password:

About Central Login | [Help](#) | [List of services](#) | [E-mail activation](#)

The Central Login enables users to log into internet services provided by the Jagiellonian University. By logging into one service you gain access to other online services (you need to enter your password only once). If you log out, you are automatically logged out of all available services. The Central Login increases your security - the password is entered only once and you always log into the same secure website.

To use the **Central Login** you need to enter your ID and password.

Your ID is your Jagiellonian University e-mail address:

► **yourname.yoursurname@uj.edu.pl**

Please note that because a few Jagiellonian University users have the same first name and surname, some e-mail addresses may have a different pattern.

Students who need to access USOSweb and do not have a Jagiellonian University e-mail address may use an alternative login ID in the form of `usosweb-login@usosweb.uj.edu.pl`, where "usosweb-login" is usually a unique number provided by the Student Services Office. If you need further information please look under [Help](#) tab.

Student gets access to her achievements in Jagiellonian University

USOS web

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- ▶ decisions
- ▶ promotions
- ▶ dean's groups
- ▶ rankings
- ▶ applications
- ▶ stipends
- ▶ student mobility
- ▶ surveys
- ▶ payments
- ▶ diplomas
- ▶ obligations

UJ E-MAIL ACTIVATION

Send your achievements data

Look out. You are about to send your personal data, along with some information on your grades, courses and study programs, to an external application.

This service is a part of an international project (EMREX) which is still in the stages of being developed and tested. If you encounter any technical problems please report it in your dean's office.

The report which we are going to send to the external application will include the information on your grades and other achievements related to the courses selected below.

The report will contain PDF file with your achievements. Choose the language for this document:

Polish
 English

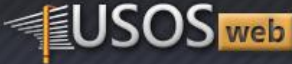

2016/2017 summer semester

Course	Hours of classes	Grades i	ECTS credits
(in Polish) Przekład audiowizualny WF.KBP64	30 hours CW	4 n/a	3
Computer techniques for translators: CAT tools WF.KBP17	30 hours CW	5 n/a	3
Global Understanding WF.KBP67	30 hours CW	5 n/a	3
Introduction to Simultaneous Interpreting WF-IFG-MS9T-2L	30 hours CW	CW: 4 n/a	2
Literary Translation II WF-IFG-MS8T-2L	30 hours CW	CW: 4,5 n/a	2
Practical translation: German/Polish – informative & press texts WF.KBP12	30 hours CW	4,5 n/a	3
Simultaneous translation WF_FEN-SM,O2.19	30 hours CW	CW: 3 n/a	4
Translation A→B English (legal texts) WF.KBP53	45 hours CW	4 34 (25) 41	3
Translation C→A German (legal texts) WF.KBP51d	30 hours CW	5 n/a	3
Translation of advertising texts WF.KBP65	30 hours CW	5 n/a	3

Sum of credits: **29**.

Continue
Cancel

Student confirms export

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- ▶ student mobility
- ▶ surveys
- ▶ payments
- ▶ diplomas
- ▶ obligations

UJ E-MAIL ACTIVATION

Send your achievements data



Once you click the "Export" button, your personal data, including selected grades, courses and study programmes, will be sent to an external application.

If you want, you can also review the files being sent:


- PDF file (not digitally signed),
- EMREX-ELMO file (digitally signed).

CONFIRMATION

Jagiellonian University in Kraków is not related to the person or institution to which the report will be sent, and is not responsible for the way your data will be handled by the recipient. We recommend to continue only if you trust the page which has brought you here.

I understand these warnings and want to continue (required)



[Export](#) [Cancel](#)



Jagiellonian University in Kraków

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and is back home, in Warsaw, with the list of courses ...

USOSweb

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- ▶ student mobility
- ▶ surveys
- ▶ payments
- ▶ diplomas

Import your achievements data

step 1

Choice of country/institution

step 2

Export

step 3

Confirmation

ELMO file has been imported correctly

Imported data come from the institution: Jagiellonian University in Kraków

To complete the process, click "Apply" and provide the necessary data. You will be redirected to the survey.

ELMO file has been verified successfully.

If you want, you can also preview the files being sent:

- PDF file (optionally digitally signed),
- EMREX-ELMO file (digitally signed).

Courses not linked with any study program

No.	Course	Academic term	Grades	Class	ECTS credits
1	Global Understanding (en) <small>Komunikacja międzykulturowa w nowych mediach (pl) WF.KBP67</small>	2016/2017 summer semester (en) <small>Semestr letni 2016/2017 (pl)</small>	5	Class (en) <small>Ćwiczenia (pl) - 30 hours</small>	3
2	Computer techniques for translators: CAT tools (en) <small>Narzędzia CAT (pl) WF.KBP17</small>	2016/2017 summer semester (en) <small>Semestr letni 2016/2017 (pl)</small>	5	Class (en) <small>Ćwiczenia (pl) - 30 hours</small>	3
3	Przekład audiowizualny (pl) <small>WF.KBP64</small>	2016/2017 summer semester (en) <small>Semestr letni 2016/2017 (pl)</small>	4	Class (en) <small>Ćwiczenia (pl) - 30 hours</small>	3

and transcript of records in PDF and XML formats

Kraków, 28.11.2017

TRANSCRIPT OF RECORDS

INFORMATION ON THE STUDENT

Surname:
 First name(s): *Agnieszka*
 Date of birth (day, month, year):
 Student identification number or code:

INFORMATION ON THE STUDIES

Name of the programme: *Przekład i komunikacja międzykulturowa, stacjonarne drugiego stopnia*
 Date of the beginning of studies: *01.10.2016*
 Mode of study: *full-time*; Level of qualification: *second-cycle*
 Field of study: *Linguistics*
 Name of the programme: *MOST*
 Date of the beginning of studies: *27.02.2017*
 Mode of study: *full-time*; Level of qualification: *null*

INFORMATION ON THE RESULTS GAINED

Courses by didactic cycles	Type/No. of hrs	Grade	ECTS
<i>2016/2017 summer semester</i>			
<i>(WF.KBP17) Computer techniques for translators: CAT tools</i>	<i>cw 30</i>	<i>5</i>	<i>3</i>
<i>(WF.KBP67) Global Understanding</i>	<i>cw 30</i>	<i>5</i>	<i>3</i>
<i>(WF-IFG-MS9T-2L) Introduction to Simultaneous Interpreting</i>	<i>cw 30</i>	<i>[4]</i>	<i>2</i>
<i>(WF-IFG-MS8T-2L) Literary Translation II</i>	<i>cw 30</i>	<i>[4,5]</i>	<i>2</i>
<i>(WF.KBP12) Practical translation: German/Polish – informative & press texts</i>	<i>cw 30</i>	<i>4,5</i>	<i>3</i>
<i>(WF.KBP64) Przekład audiowizualny</i>	<i>cw 30</i>	<i>4</i>	<i>3</i>
<i>(WF.FEN-SM.O2.19) Simultaneous translation</i>	<i>cw 30</i>	<i>[3]</i>	<i>4</i>
<i>(WF.KBP53) Translation A → B English (legal texts)</i>	<i>cw 45</i>	<i>4</i>	<i>3</i>
<i>(WF.KBP51d) Translation C → A German (legal texts)</i>	<i>cw 30</i>	<i>5</i>	<i>3</i>
<i>(WF.KBP65) Translation of advertising texts</i>	<i>cw 30</i>	<i>5</i>	<i>3</i>
ECTS in total:			29

Course code description

cw class

Grades outside brackets are course grades, grades inside brackets are grades for the classes, vertical bar separates grades for various classes, semicolon separates grades on various exam reports, space separates grades on the same exam report, order of grades on a report follows order of exam sessions.

ZAL (zaliczenie) = non-graded pass, NZAL (niezaliczenie) = fail, — = no grade in the examination protocol.

ECTS credits: 1 full academic year = 60 credits.

EMREX in Poland – implementation

- Implementation of NCP, SMP and EMREX Client is spread across two USOS subsystems:
 - **USOS API** – a collection of web services, written primarily in Python, publicly documented in English, and designed for use by external consumers. NCP endpoints are implemented in USOS API installations.
 - **USOSweb** – a web portal used by all students and staff members in their daily academic activities, written primarily in PHP. Hosts EMREX Client.
- Every HEI in Poland which runs USOS has its own installation of USOS API and USOSweb subsystems.

USOS API Reference

USOS API is a simple and fat-free REST-like protocol, which allows developers to access academic database. In case of this installation, you will be accessing **The University of Warsaw's** data, but there are [many other](#) institutions which use USOS API.

Basically, there are **three ways** to access USOS API:

- **Anonymously:** If you choose not to authenticate, you will be limited only to a subset (but still, fairly usable subset) of API methods. The main advantage of this solution is it's simplicity: just plain old simple HTTP requests.
- **With an API Key:** With one of those, you'll be able to **ask users to share their data** with you. Acquiring an API Key is easy, but you will also have to understand the Authorization stuff (we use a widely known OAuth standard, so there are many client libraries for you to find).
- **Administrative API Key:** This one is big. It might - for example - allow you to run any method as any user. You will need to [contact us](#) directly to get one, though!

USOS API Reference is a complete set of documentation needed in order to use the API.

- Read about our [authorization model](#).
- Browse [available services](#) (we are still adding new ones!).
- Try some working [examples](#).

Thanks for your interest!
USOS API Team.

USOSweb

NEWS DIRECTORY **MY USOSWEB** STUDENT'S SECTION STAFF SECTION EXTRA MODULES ADMINISTRATION

MY SHORTCUTS

- SCHEDULE
- CLASS GROUPS
- CUSTOM SCHEDULES
- USOS MAIL
- PREFERENCES

SCHEDULE - CURRENT WEEK

MON	TUE	WED	THU	FRI	SAT	SUN
13	14	15	16	17	18	19

SCHEDULE - NEXT WEEK

MON	TUE	WED	THU	FRI	SAT	SUN
20	21	22	23	24	25	26

QUICK GRADE

Student's name or number:

TEACHERS TESTS

2016 Advanced Topics in Operating Systems [more...](#)

TEACHERS CLASSES

2016 Distributed Systems 100-109758
COORDINATOR – Master's seminar

2016 Distributed Systems 100-109758
COORDINATOR – Master's seminar

2016 (in Polish) Zintegrowane systemy informatyczne w zarządzaniu uczelnią
Lecture

2016 Advanced Topics in Operating Systems 100-200230
COORDINATOR – Lab (1), Lab (2), Lecture [previous class](#)

DIRECTORY

Faculty of Mathematics, Informatics, and Mechanics courses
people directory
courses directory
faculty directory
studies directory

Find person: Find department:

Find course: Find program:

SCHEDULES

Staff member's schedule:

Course schedule:

Course group schedule:

Department name:

PREFERENCES

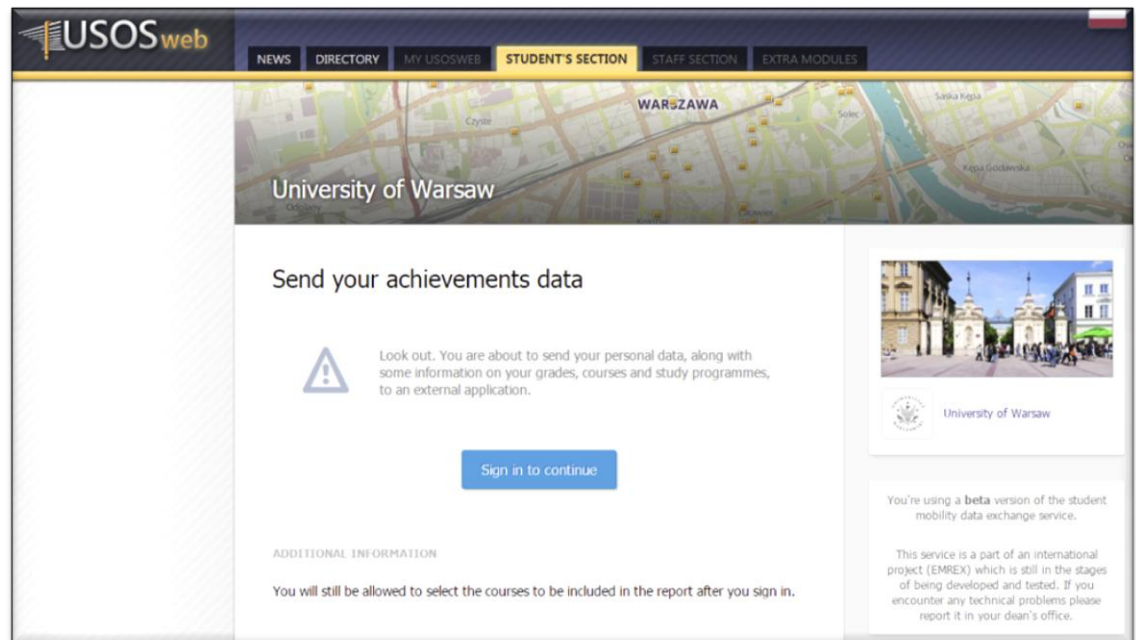
- Email confirmation of the application: no
- 30 rows on single page
- Order by code/ID
- Favorite department: Faculty of Mathematics, Informatics, and Mechanics

[change these settings](#)

EMREX in Poland – implementation

- A user signs in to a local USOS installation and initiates the EMREX exchange on a dedicated USOSweb page.
- USOSweb fetches the list of NCP servers from EMREG via USOS API (USOS API is also responsible for caching EMREG responses).
- The student selects the NCP server on the USOSweb page, and then USOS API method is called with the server's URL.
- The user is redirected to the NCP URL with the return URL parameter referring back to a proper **receiver USOS API method**.
- Once the user accesses the NCP-related USOSweb web page, he is asked to sign in (second time).

Logging to the NCP of the University of Warsaw




The screenshot shows the USOSweb interface. At the top, there is a navigation bar with the USOSweb logo and several menu items: NEWS, DIRECTORY, MY USOSWEB, STUDENT'S SECTION (highlighted), STAFF SECTION, and EXTRA MODULES. Below the navigation bar is a map of Warsaw with the text "University of Warsaw" overlaid. The main content area features a warning icon (a triangle with an exclamation mark) and the text: "Look out. You are about to send your personal data, along with some information on your grades, courses and study programmes, to an external application." Below this warning is a blue button labeled "Sign in to continue". At the bottom of the main content area, there is a section titled "ADDITIONAL INFORMATION" with the text: "You will still be allowed to select the courses to be included in the report after you sign in." On the right side of the interface, there is a small image of a building, the University of Warsaw logo, and the text: "University of Warsaw". Below this, there is a notice: "You're using a beta version of the student mobility data exchange service." and a paragraph: "This service is a part of an international project (EMREX) which is still in the stages of being developed and tested. If you encounter any technical problems please report it in your dean's office."

EMREX in Poland – implementation

- The user is presented with the list of courses and is allowed to select any subset of them.
- When the user clicks SEND, NCP response is constructed with the EMREX-ELMO document (communication with USOS API is done in the background).
- POST request is sent directly from user browser to the EMREX Client.

Send your achievements data

 Look out. You are about to send your personal data, along with some information on your grades, courses and study programmes, to an external application.

COURSE SELECTION

The report which we are going to send to the external application will include the information on your grades and other achievements related to the courses selected below.

Academic year 2014/15:

- History of Byzantine culture - **3,5**
- History of culture in the European Middle Ages - **3**
- History of the contemporary Mediterranean region - **3,5**
- Selected issues of culture of regions - **4,5**
- Seminar – Contemporary Iberia - **4,5**

Winter semester 2014/2015:


- Audiovisuality in culture - **3,5**

CONFIRMATION

The report will also include your personal data, such as date of birth, or passport and national security numbers.

University of Warsaw is not related to the person or institution to which the report will be sent, and is not responsible for the way your data will be handled by the recipient. We recommend to continue only if you trust the page which has brought you here.

I understand these warnings and want to continue (required)



University of Warsaw

You're using a beta version of the student mobility data exchange service.

This service is a part of an international project (EMREX) which is still in the stages of being developed and tested. If you encounter any technical problems please report it in your dean's office.

Selecting results at the NCP of the University of Warsaw

EMREX in Poland – implementation

- The user is redirected to the home USOSweb subsystem and presented with the results of the EMREX-ELMO processing.
- The received EMREX-ELMO document is stored and verified.
- If the verification process goes well, and the local system is able to understand the data in the document, then it may additionally allow the student to select the courses which he would like to store locally (this being an extra option).
- Suspicious import requests would need to be approved by an authorized staff member (PDF document attached to EMREX-ELMO XML should be useful in this case).

```

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      <identifier type="usos.polon_id">UW</identifier>
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      <end>2015-06-09</end>
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```

```

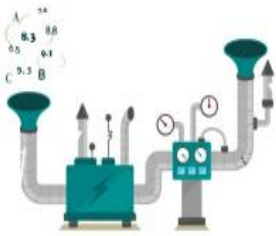
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```

EMREX-ELMO XML continued

Other issues

- Signatures – signing is done in backend without human interaction
 - Signing XML is easy (system certificate).
 - Signing PDF is more challenging since the signature should be recognizable by PDF readers.
- Grade conversion should be applied automatically if needed
- For some partners sending PDF may be easier than sending XML, so it may happen that these two documents are not equivalent.



Grade conversion made easy

Grading Distributions Comparison

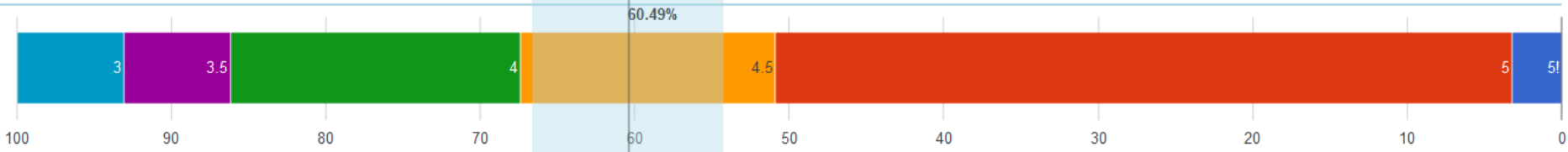
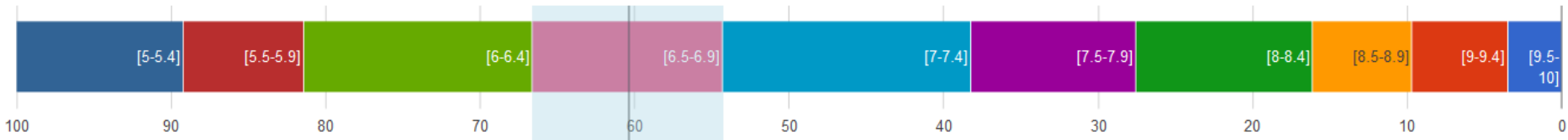
Close PDF

Host Institution: University of Leon

Discipline: BACHELOR - 0112-Training for pre-school teachers

Awarded grade: [6.5-6.9]

Grade	[5-5.4]	[5.5-5.9]	[6-6.4]	[6.5-6.9]	[7-7.4]	[7.5-7.9]	[8-8.4]	[8.5-8.9]	[9-9.4]	[9.5-10]
Percentage	10.81%	7.76%	14.78%	12.34%	16.1%	10.67%	11.39%	6.47%	6.24%	3.46%
Cumulative	100%	89.19%	81.43%	66.65%	54.32%	38.22%	27.55%	16.16%	9.69%	3.46%



Home Institution: University of Warsaw

Discipline: BACHELOR - 0112-Training for pre-school teachers

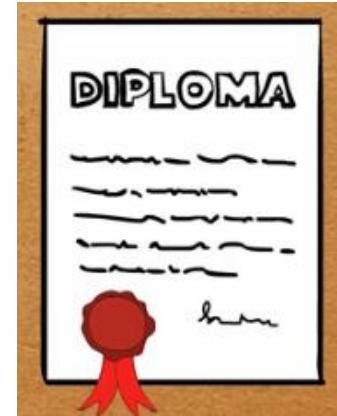
Suggested result grade: 4.5

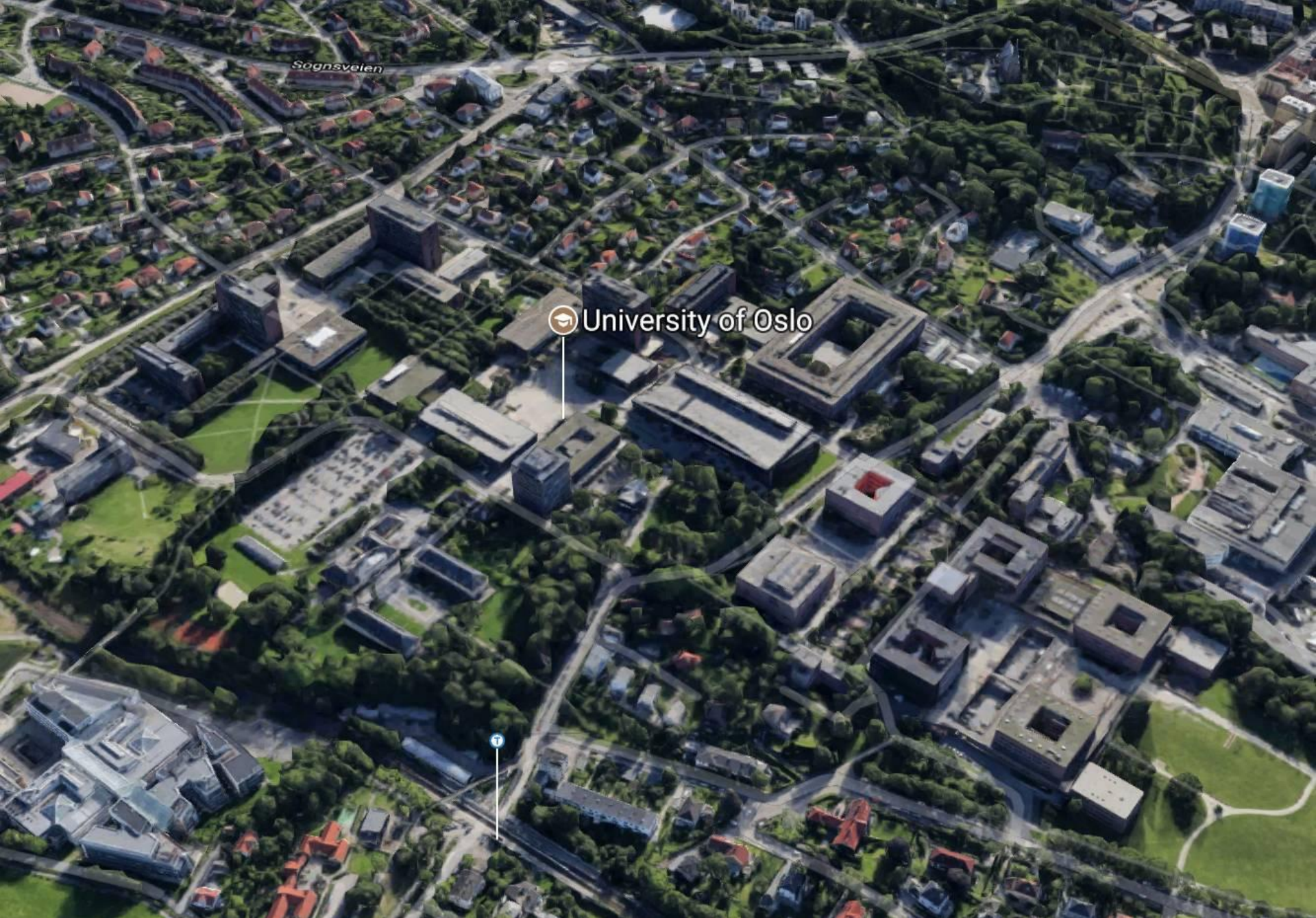
Grade	ZAL	3	3.5	4	4.5	5	5!
Percentage	0%	6.95%	6.9%	18.74%	16.52%	47.66%	3.23%
Cumulative	100%	100%	93.05%	86.15%	67.41%	50.89%	3.23%

<http://egracons.eu/>

Where else can EMREX help?

- Internal national mobility.
- Admission to educational institutions.
- Recruitment for jobs.
- Validation of degrees and diplomas.
- Informal learning.





Sognsveien

University of Oslo

T

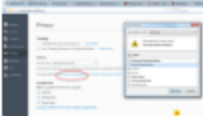
EMREX in Norway

EMREX in Norway

- Use of EMREX in Norwegian admission
 - Prerequisites to study programmes
 - Degrees
 - Courses
 - Admission criteria
 - Study points
 - Grades

Admission web for applicants

New Application English Kaisa Keränen Bytt bruker

 **Søknadsweb**
University of Oslo-utv

1 My Profile 2 Choose Admission 3 Apply 4 **Documents** 5 Receipt

Uploading documents

You may here upload documents that verify your experience and competence.

Submission deadline

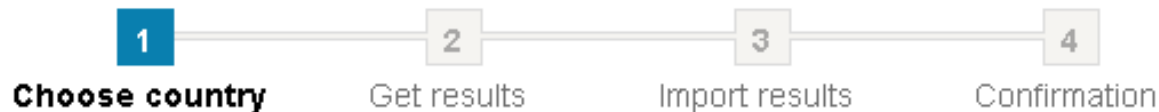
Application	Deadline
Master of Testing Autumn 2015	Please submit documents before 1. july 2017

+ Choose new document + Import results from abroad

Previous Next

Use EMREX to retrieve results

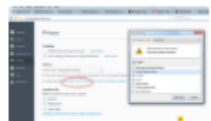
Emrex sequence



Here you can fetch results from another higher education institution in Europe. The results will be digitally signed by the issuing institution, and you will have the possibility to import them to Admission Web. This process is part of EMREX, an international project for electronic transfer of student records between higher education institutions.

Choose country:

Go to chosen country



Søknavsweb

University of Oslo-utv

My Applications

▼ Master of Testing Term for admission Autumn 2015




<http://www.uis.no/forskning-og-ph-d-studier/forskerskolen-profres/opptak/> 

Application deadline 05.05.2017

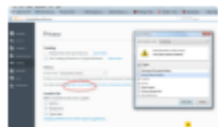
Early Application Deadline 21.12.2016

Result will be published 24.11.2016

Documentation submission deadline Please submit documents before 1. july 2017

 Change application Cancel application Receipt

Priority	Code	Study	You have requested special assessment	Status
1	1009	Master of Trends	No	Under consideration



Søknsadsweb

University of Oslo-utv

External Results

This chart shows the results obtained from other Norwegian institutions, as of today. It will be updated when new imports are performed.

Semester	Course	Result	ECTS
2012 AUTUMN	Orjentoituvat opinnot (University of Tampere)	Bestått	2
2012 AUTUMN	Tietotekniikkataidot (University of Tampere)	Bestått	3
2012 AUTUMN	Ruotsin kielen kirjallinen ja suullinen viestint? (University of Tampere)	Bestått	0

[Import of results from abroad](#)

Process of data from EMREX

Søknernr: Fnr: **185766 90084** Navn: **Keränen Kaisa**
Opptak: **MS SOKW-ME** Termin: **2015 - HØST**
Opptakstudieprogram: **185 1009 Master of Trends**

Kode	Navn	Termin	SP	Karakter
Tampereen yliopisto				
<--	Tietotekniikkataidot	2012H	3	0
<--	Ruotsin kielen kirjallinen ja suullinen	2012H	0	0
<--	Orjentoituvat opinnot	2012H	2	0

Hent ekstern norsk utdanning

Vis

Bestilt 27.01.2017 15:42

Har bachelor-grad: **Nei**

Oppdater kvalifikasjonsgrunnlag og poeng

Manuell registrering

Also for internal mobility

Kode	Navn	Termin	SP	Karakter
Høgskolen i Oslo og Akershus				180
<input type="button" value="Hent ekstern norsk utdanning"/> <input type="button" value="Vis"/>				
Kode	Navn	SP	Kar.	Poeng
Høgskolen i Oslo og Akershus				
<input checked="" type="checkbox"/> <input type="checkbox"/>	BLH1100-1	Barns utvikling, lek og læring	20 B	4
<input checked="" type="checkbox"/> <input type="checkbox"/>	BLH2100-1	Språk, tekst og matematikk	20 C	3
<input checked="" type="checkbox"/> <input type="checkbox"/>	BLH2200-1	Samfunn, religion, livssyn og etikk	20 C	3
<input checked="" type="checkbox"/> <input type="checkbox"/>	BLH3900-1	Bacheloroppgave	15 D	2
Totalt			75	3,07
Kode	Navn	Termin	SP	Karakter
Høgskolen i Oslo og Akershus				180
<input type="button" value="←"/>	BLH1100-1 1	Barns utvikling, lek og læring	B 2014V	20 B
<input type="button" value="←"/>	BLH1200-1 2	Natur, helse og bevegelse	B 2014V	20 C
<input type="button" value="←"/>	BLH1300-1 3	Kunst, kultur og kreativitet	B 2014V	20 A
<input type="button" value="←"/>	BLHP1ÅR-1 8	Praksis i barnehage, 1. studieår	B 2014V	0 Bestått
	BLH2100-1 4	Språk, tekst og matematikk	B 2014H	20 C
	BLH2200-1 5	Samfunn, religion, livssyn og etikk	B 2015V	20 C
<input type="button" value="←"/>	BLH2500-1 6	Forsterkning i kunnskapsområdet n	B 2015V	20 D
<input type="button" value="←"/>	BLHP2000-1 9	Praksis i barnehage, 2. studieår	B 2015V	0 Bestått
<input type="button" value="←"/>	BLH3140-1 7	Barn med særlige behov	B 2015H	30 C
<input type="button" value="←"/>	BLH 12	Bachelorstudium i barnehagelærer	B 2016V	0
<input type="button" value="←"/>	BLH3010-1 10	Praksis- og studieopphold ved instit	B 2016V	15 C
	BLH3900-1 11	Bacheloroppgave	B 2016V	15 D

EMREX in Norway

- Use of trustable, standardised and comparable data in the admission process
 - Simplify the process for the applicant
 - Simplify the process for the administrator
 - Improve quality
 - A more transparent process

Q&A